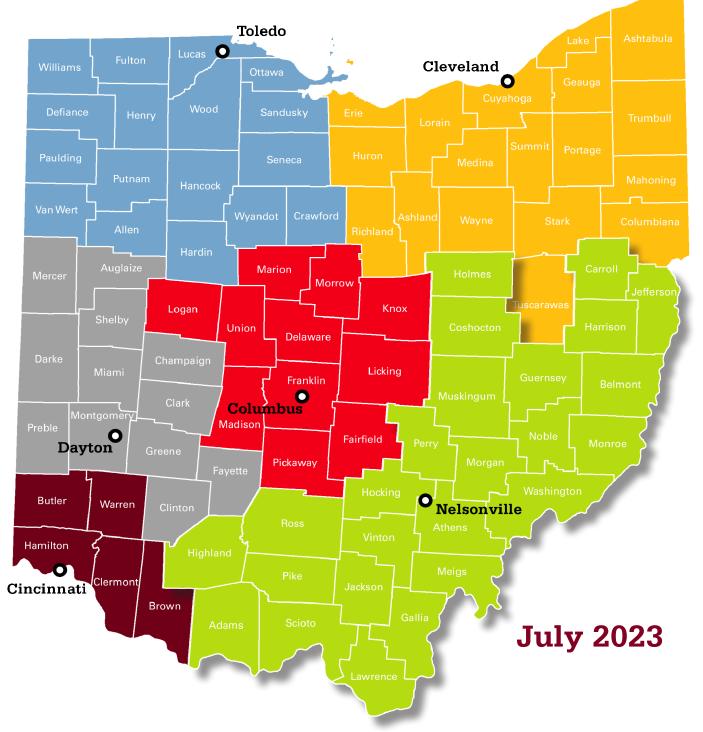


2030 Job Outlook

JobsOhio Network Southeast Ohio



2030 Job Outlook for JobsOhio Network Regions

The Ohio Department of Job and Family Services' Bureau of Labor Market Information updates employment projections every two years. The projections are widely used for studying long-range economic and employment trends, planning education and training programs, and developing career information. This edition uses employment statistics through 2020 as a foundation to project employment conditions for the 10-year period ending in 2030.

The table below summarizes 2020 employment levels and projected 2030 levels for Ohio's six JobsOhio Regions. The difference between those years represents projected new jobs due to industry growth. The number of these new jobs is expected to range from a growth of 93,045 in the Central Region to a growth of 13,641 jobs in the Southeast Region. Among the state's regions, the highest projected growth is in Central Ohio (8.0%); followed by Southwest Ohio (6.0%), West Ohio (4.1%), Southeast Ohio (4.0%), Northeast Ohio (3.0%), and Northwest Ohio (2.7%).

	2020	2030 Projected	Projected 2020-2	
JobsOhio Regions	Employment	Employment	Number	Percent
Central Ohio	1,168,921	1,261,966	93,045	8.0%
Southwest Ohio	888,939	942,233	53,294	6.0%
West Ohio	590,922	615,181	24,259	4.1%
Southeast Ohio	345,649	359,290	13,641	4.0%
Northeast Ohio	1,996,374	2,056,711	60,337	3.0%
Northwest Ohio	576,227	591,855	15,628	2.7%

Comparison of JobsOhio Regional Network: 2020-2030

Each 2030 Job Outlook report for Ohio's JobsOhio Region contains a summary of the employment outlook by industry and occupation. Typical education, work experience, and on-the-job training required for each occupation are provided. Annual openings are the result of industry growth and vacancies resulting from retirement and transfers to different occupations.

Technical Notes

Projections of employment demand were made primarily at the four-digit industry level and then aggregated to the three-digit level, based on the North American Industry Classification System (NAICS). Shift-share, time-series and regression analysis techniques were used to compare Ohio's historical regional industry employment to statewide and national industry employment, population growth and various other factors. State and local area projections are partially dependent on the outlook for specific industries nationally.

Regional staffing patterns were estimated using the Local Employment and Wage Information System, which creates wage estimates for customized geographic regions using data from the Occupational Employment and Wage Statistics (OEWS) surveys. Wage estimates are based on Ohio's OEWS surveys. Wage estimates represent May 2021.

Ohio industry staffing patterns were adjusted for expected technological change and other factors from national data provided by the U.S. Bureau of Labor Statistics (BLS). To project occupational openings, Ohio uses national separation rates calculated by the BLS caused by workers exiting the labor force due to retirement or other reasons (labor force exits) and separations caused by workers transferring to different occupations (occupational transfers). Projections of separations are combined with projections of employment change to estimate occupational openings.

Inclusion of education and training levels is made possible by the classification of the Standard Occupational Classification-based occupations into 11 distinct categories by the BLS Office of Occupational Statistics and Employment Projections.

Because it is difficult to estimate future needs with certainty, the long-term job outlook data are updated every other year. More information about projected local job growth in Ohio is available through reports published at <u>Employment Projections (ohiolmi.com</u>).

For more information, contact the Ohio Bureau of Labor Market Information at (614) 752-9494 or <u>ContactLMI@jfs.ohio.gov</u>.

		Emplo	yment*	Chang	ge in					
SOC		2020	2030	Employ	ment		Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
00-0000	Total, All Occupations	345,649	359,290	13,641	4.0%	1,364	16,034	22,919	40,317	\$17.86
11-0000	Management Occupations	31,712	33,526	1,814	5.7%	181	1,539	1,388	3,108	\$37.34
11-1011	Chief Executives	195	181	-14	-7.2%	-1	5	8	12	\$78.25
11-1021	General and Operations Managers	3,721	3,914	193	5.2%	19	76	237	332	\$35.94
11-1031	Legislators	321	336	15	4.7%	2	8	16	26	\$36,208 **
11-2022	Sales Managers	224	224	0	0.0%	0	4	14	18	\$57.28
11-3010	Administrative Services and Facilities Managers	467	486	19	4.1%	2	14	24	40	\$47.73 ^
11-3021	Computer and Information Systems Managers	151	160	9	6.0%	1	2	9	12	\$56.99
11-3031	Financial Managers	661	761	100	15.1%	10	15	36	61	\$49.32
11-3051	Industrial Production Managers	605	620	15	2.5%	2	12	29	43	\$47.24
11-3071	Transportation, Storage, and Distribution Managers	311	346	35	11.3%	4	6	18	28	\$37.34
11-3121	Human Resources Managers	109	114	5	4.6%	0	3	6	9	\$56.91
11-9013	Farmers, Ranchers, and Other Agricultural Managers	19,850	20,745	895	4.5%	90	1,252	705	2,047	\$35.12 ^
11-9021	Construction Managers	562	621	59	10.5%	6	12	30	48	\$43.49
11-9032	Education Administrators, Elementary and Secondary School	809	844	35	4.3%	4	20	38	62	\$94,315 **
11-9033	Education Administrators, Postsecondary	235	243	8	3.4%	1	6	11	18	\$45.96
11-9051	Food Service Managers	656	729	73	11.1%	7	21	55	83	\$23.35
11-9081	Lodging Managers	117	125	8	6.8%	1	5	8	14	\$27.80
11-9111	Medical and Health Services Managers	897	1,128	231	25.8%	23	25	51	99	\$38.43
11-9141	Property, Real Estate, and Community Association Managers	376	400	24	6.4%	2	15	15	32	\$22.38
11-9151	Social and Community Service Managers	410	477	67	16.3%	7	13	24	44	\$29.01
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except									
	Gambling; and Managers, All Other	408	427	19	4.7%	2	10	20	32	\$59.93 ^^^
13-0000	Business and Financial Operations Occupations	9,101	9,640	539	5.9%	54	250	555	859	\$29.17
13-1020	Buyers and Purchasing Agents	550	519	-31	-5.6%	-3	18	34	49	\$27.85
13-1031	Claims Adjusters, Examiners, and Investigators	141	131	-10	-7.1%	-1	3	7	9	\$38.60
13-1041	Compliance Officers	373	400	27	7.2%	3	9	21	33	\$27.21
13-1051	Cost Estimators	449	450	1	0.2%	0	13	27	40	\$29.11
13-1071	Human Resources Specialists	844	886	42	5.0%	4	23	58	85	\$27.40
13-1075	Labor Relations Specialists	314	270	-44	-14.0%	-4	8	19	23	\$30.35
13-1081	Logisticians	281	372	91	32.4%	9	7	21	37	\$37.03
13-1111	Management Analysts	384	451	67	17.5%	7	13	24	44	\$36.43
13-1121	Meeting, Convention, and Event Planners	164	168	4	2.4%	0	5	12	17	\$28.94
13-1131	Fundraisers	166	183	17	10.2%	2	5	11	18	\$27.36
13-1151	Training and Development Specialists	360	397	37	10.3%	4	11	23	38	\$23.15
13-1161	Market Research Analysts and Marketing Specialists	598	701	103	17.2%	10	15	48	73	\$23.76
13-1198	Project Management Specialists and Business Operations Specialists, All Other	1,422	1,488	66	4.6%	7	34	71	112	\$35.90 ^^^
13-2011	Accountants and Auditors	1,750	1,850	100	5.7%	10	50	107	167	\$29.66
13-2052	Personal Financial Advisors	312	351	39	12.5%	4	8	16	28	\$35.62
13-2072	Loan Officers	386	387	1	0.3%	0	8	21	29	\$30.37

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial									
	Specialists, All Other	224	237	13	5.8%	1	4	13	18	\$35.21 ^^^
15-0000	Computer and Mathematical Occupations	2,599	2,808	209	8.0%	21	54	134	209	\$29.89
15-1211	Computer Systems Analysts	218	234	16	7.3%	2	4	11	17	\$36.05
15-1231	Computer Network Support Specialists	278	290	12	4.3%	1	5	15	21	\$28.90
15-1232	Computer User Support Specialists	573	602	29	5.1%	3	11	31	45	\$22.44
15-1244	Network and Computer Systems Administrators	451	460	9	2.0%	1	8	22	31	\$36.89
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	420	490	70	16.7%	7	11	22	40	\$49.49 ^^^
15-1299	Computer Occupations, All Other	173	185	12	6.9%	1	4	9	14	\$36.05
17-0000	Architecture and Engineering Occupations	4,067	4,282	215	5.3%	22	106	212	340	\$36.30
17-1022	Surveyors	120	121	1	0.8%	0	4	6	10	\$28.02
17-2051	Civil Engineers	207	221	14	6.8%	1	4	11	16	\$37.62
17-2071	Electrical Engineers	245	245	0	0.0%	0	6	10	16	\$44.82
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	103	113	10	9.7%	1	2	4	7	\$48.98
17-2112	Industrial Engineers	575	651	76	13.2%	8	13	24	45	\$37.89
17-2141	Mechanical Engineers	348	360	12	3.5%	1	6	15	22	\$35.85
17-2199	Engineers, All Other	128	130	2	1.6%	0	3	5	8	\$36.17
17-3023	Electrical and Electronics Engineering Technicians	467	476	9	1.9%	1	14	29	44	\$28.52
17-3026	Industrial Engineering Technicians	216	225	9	4.2%	1	7	14	22	\$27.41
17-3098	Calibration and Engineering Technologists and Technicians, Except Drafters, All									
	Other	165	167	2	1.2%	0	5	10	15	\$29.18 ^^^
19-0000	Life, Physical, and Social Science Occupations	2,079	2,255	176	8.5%	18	50	142	210	\$30.65
19-2041	Environmental Scientists and Specialists, Including Health	223	242	19	8.5%	2	4	18	24	\$38.90
19-3031	Clinical, Counseling, and School Psychologists	180	193	13	7.2%	1	5	7	13	\$38.96 ^^^
19-5011	Occupational Health and Safety Specialists	481	565	84	17.5%	8	14	22	44	\$35.82
19-5012	Occupational Health and Safety Technicians	110	127	17	15.5%	2	3	5	10	\$23.08
21-0000	Community and Social Service Occupations	6,446	7,331	885	13.7%	88	226	442	756	\$22.03
21-1012	Educational, Guidance, School, and Vocational Counselors	922	982	60	6.5%	6	31	56	93	\$29.30
21-1015	Rehabilitation Counselors	230	248	18	7.8%	2	8	14	24	\$17.70
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	959	1,193	234	24.4%	23	35	64	122	\$22.42
21-1021	Child, Family, and School Social Workers	523	585	62	11.9%	6	16	35	57	\$21.78
21-1022	Healthcare Social Workers	426	476	50	11.7%	5	13	28	46	\$23.91
21-1023	Mental Health and Substance Abuse Social Workers	682	821	139	20.4%	14	21	48	83	\$18.68
21-1029	Social Workers, All Other	354	381	27	7.6%	3	10	23	36	\$28.54
21-1092	Probation Officers and Correctional Treatment Specialists	297	305	8	2.7%	1	6	18	25	\$22.96
21-1093	Social and Human Service Assistants	1,203	1,428	225	18.7%	22	52	99	173	\$14.94
21-1099	Community and Social Service Specialists, All Other	181	198	17	9.4%	2	6	13	21	\$18.32
21-2011	Clergy	335	344	9	2.7%	1	14	20	35	\$23.73
23-0000	Legal Occupations	1,149	1,165	16	1.4%	2	33	48	83	\$29.38
23-1011	Lawyers	393	402	9	2.3%	1	9	10	20	\$37.68
23-1023	Judges, Magistrate Judges, and Magistrates	257	258	1	0.4%	0	6	6	12	\$47.62

		Emplo	yment*	Chang	ge in					
SOC		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
23-2011	Paralegals and Legal Assistants	330	345	15	4.6%	2	13	23	38	\$18.06
25-0000	Education, Training, and Library Occupations	22,868	24,074	1,206	5.3%	121	877	1,030	2,028	\$29.04
25-1011	Business Teachers, Postsecondary	224	230	6	2.7%	1	10	11	22	\$98,831 **
25-1022	Mathematical Science Teachers, Postsecondary	112	116	4	3.6%	0	5	5	10	\$77,456 **
25-1032	Engineering Teachers, Postsecondary	146	158	12	8.2%	1	7	7	15	\$99,600 **
25-1042	Biological Science Teachers, Postsecondary	126	137	11	8.7%	1	6	6	13	\$77,833 **
25-1066	Psychology Teachers, Postsecondary	122	129	7	5.7%	1	6	6	13	\$77,629 **
25-1071	Health Specialties Teachers, Postsecondary	471	553	82	17.4%	8	23	24	55	\$82,106 **
25-1072	Nursing Instructors and Teachers, Postsecondary	199	234	35	17.6%	4	10	10	24	\$71,830 **
25-1081	Education Teachers, Postsecondary	121	126	5	4.1%	0	6	6	12	\$61,550 **
25-1121	Art, Drama, and Music Teachers, Postsecondary	235	246	11	4.7%	1	11	11	23	\$61,550 **
25-1122	Communications Teachers, Postsecondary	118	123	5	4.2%	0	5	6	11	\$81,248 **
25-1123	English Language and Literature Teachers, Postsecondary	201	208	7	3.5%	1	9	10	20	\$63,742 **
25-1193	Recreation and Fitness Studies Teachers, Postsecondary	112	116	4	3.6%	0	5	5	10	\$63,742 **
25-1194	Vocational Education Teachers, Postsecondary	265	261	-4	-1.5%	0	12	12	24	\$29.13
25-1199	Postsecondary Teachers, All Other	234	239	5	2.1%	0	11	11	22	\$58,917 **
25-2011	Preschool Teachers, Except Special Education	597	688	91	15.2%	9	26	38	73	\$13.75
25-2012	Kindergarten Teachers, Except Special Education	161	168	7	4.4%	1	7	10	18	\$61,006 **
25-2021	Elementary School Teachers, Except Special Education	5,130	5,301	171	3.3%	17	160	209	386	\$61,318 **
25-2022	Middle School Teachers, Except Special and Career/Technical Education	1,892	1,954	62	3.3%	6	59	77	142	\$62,224 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	3,528	3,659	131	3.7%	13	95	146	254	\$61,922 **
25-2032	Career/Technical Education Teachers, Secondary School	860	885	25	2.9%	2	23	35	60	\$72,486 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	430	451	21	4.9%	2	14	18	34	\$61,044 **
25-2057	Special Education Teachers, Middle School	326	337	11	3.4%	1	11	13	25	\$59,617 **
25-2058	Special Education Teachers, Secondary School	616	653	37	6.0%	4	21	25	50	\$60,902 **
25-3021	Self-Enrichment Education Teachers	251	316	65	25.9%	6	17	15	38	\$14.44
25-3031	Substitute Teachers, Short-Term	676	730	54	8.0%	5	42	38	85	\$14.16
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	332	370	38	11.5%	4	21	19	44	\$17.94 ^^^
25-4022	Librarians and Media Collections Specialists	358	370	12	3.4%	1	18	16	35	\$22.95
25-4031	Library Technicians	183	172	-11	-6.0%	-1	15	11	25	\$13.79
25-9031	Instructional Coordinators	484	535	51	10.5%	5	25	22	52	\$29.28
25-9045	Teaching Assistants, Except Postsecondary	3,013	3,214	201	6.7%	20	139	146	305	\$27,396 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	3,127	3,215	88	2.8%	9	124	211	344	\$17.26
27-1023	Floral Designers	130	101	-29	-22.3%	-3	4	7	8	\$12.17
27-1024	Graphic Designers	200	199	-1	-0.5%	0	6	12	18	\$18.61
27-1025	Interior Designers	132	124	-8	-6.1%	-1	4	8	11	\$22.71
27-1026	Merchandise Displayers and Window Trimmers	266	267	1	0.4%	0	8	16	24	\$14.19
27-2022	Coaches and Scouts	835	882	47	5.6%	5	49	69	123	\$29,929 **
27-3011	Radio and Television Announcers	124	110	-14	-11.3%	-1	4	6	9	\$11.12
27-3023	News Analysts, Reporters, and Journalists	179	163	-16	-8.9%	-2	5	13	16	\$14.73
27-3031	Public Relations Specialists	275	305	30	10.9%	3	7	19	29	\$21.15

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
27-4021	Photographers	181	230	49	27.1%	5	7	12	24	\$14.71
29-0000	Healthcare Practitioners and Technical Occupations	25,156	26,880	1,724	6.9%	172	672	807	1,651	\$28.70
29-1011	Chiropractors	116	122	6	5.2%	1	2	1	4	\$37.61
29-1021	Dentists, General	200	200	0	0.0%	0	4	2	6	\$78.88
29-1041	Optometrists	280	292	12	4.3%	1	5	4	10	\$47.53
29-1051	Pharmacists	818	779	-39	-4.8%	-4	15	15	26	\$60.87
29-1071	Physician Assistants	124	159	35	28.2%	4	2	6	12	\$57.05
29-1122	Occupational Therapists	385	430	45	11.7%	4	9	13	26	\$37.32
29-1123	Physical Therapists	475	524	49	10.3%	5	10	10	25	\$42.41
29-1125	Recreational Therapists	101	98	-3	-3.0%	0	3	4	7	\$22.29
29-1126	Respiratory Therapists	375	453	78	20.8%	8	9	10	27	\$28.52
29-1127	Speech-Language Pathologists	316	390	74	23.4%	7	8	13	28	\$35.15
29-1131	Veterinarians	229	246	17	7.4%	2	4	4	10	\$45.96
29-1141	Registered Nurses	7,944	8,442	498	6.3%	50	219	206	475	\$29.47
29-1151	Nurse Anesthetists	241	262	21	8.7%	2	5	8	15	#
29-1171	Nurse Practitioners	736	1,150	414	56.3%	41	20	30	91	\$48.52
29-1215	Family Medicine Physicians	197	200	3	1.5%	0	3	2	5	#
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	1,166	1,182	16	1.4%	2	19	13	34	\$37.45 ^^^
29-1248	Surgeons, Except Ophthalmologists	101	99	-2	-2.0%	0	2	1	3	# ^^^
29-1292	Dental Hygienists	432	439	7	1.6%	1	16	11	28	\$29.58
29-2010	Clinical Laboratory Technologists and Technicians	560	584	24	4.3%	2	15	21	38	\$23.22
29-2031	Cardiovascular Technologists and Technicians	181	191	10	5.5%	1	5	8	14	\$28.50
29-2032	Diagnostic Medical Sonographers	184	212	28	15.2%	3	5	8	16	\$29.11
29-2034	Radiologic Technologists	498	527	29	5.8%	3	14	22	39	\$22.99
29-2040	Emergency Medical Technicians and Paramedics	1,049	1,132	83	7.9%	8	20	50	78	\$17.76 ^
29-2052	Pharmacy Technicians	1,216	1,236	20	1.6%	2	34	53	89	\$14.07
29-2055	Surgical Technologists	320	348	28	8.8%	3	9	14	26	\$22.06
29-2061	Licensed Practical and Licensed Vocational Nurses	3,996	4,147	151	3.8%	15	137	170	322	\$22.15
29-2081	Opticians, Dispensing	252	259	7	2.8%	1	11	9	21	\$20.79
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and									
	Technicians, All Other	1,012	1,054	42	4.2%	4	28	44	76	\$22.55 ^^^
31-0000	Healthcare Support Occupations	17,455	19,734	2,279	13.1%	228	1,104	1,138	2,470	\$13.67
31-1120	Home Health and Personal Care Aides	7,980	9,904	1,924	24.1%	192	572	506	1,270	\$11.15
31-1131	Nursing Assistants	4,979	4,824	-155	-3.1%	-16	314	278	576	\$13.88
31-2011	Occupational Therapy Assistants	268	325	57	21.3%	6	15	22	43	\$28.55
31-2021	Physical Therapist Assistants	444	566	122	27.5%	12	22	38	72	\$28.90
31-9011	Massage Therapists	207	250	43	20.8%	4	13	12	29	\$18.47
31-9091	Dental Assistants	614	627	13	2.1%	1	28	44	73	\$17.79
31-9092	Medical Assistants	1,669	1,922	253	15.2%	25	74	134	233	\$14.47
31-9095	Pharmacy Aides	109	83	-26	-23.9%	-3	5	7	9	\$13.08
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	335	352	17	5.1%	2	17	38	57	\$13.36

		Emplo	yment*	Chang	e in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
31-9097	Phlebotomists	345	368	23	6.7%	2	15	26	43	\$14.34
31-9099	Healthcare Support Workers, All Other	155	154	-1	-0.7%	0	9	10	19	\$14.34
33-0000	Protective Service Occupations	6,961	6,877	-84	-1.2%	-8	261	396	649	\$22.81
33-1012	First-Line Supervisors of Police and Detectives	169	174	5	3.0%	0	4	7	11	\$37.34
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	102	107	5	4.9%	0	2	4	6	\$29.09
33-2011	Firefighters	1,073	1,141	68	6.3%	7	24	57	88	\$22.19
33-3012	Correctional Officers and Jailers	2,219	1,946	-273	-12.3%	-27	78	113	164	\$22.81
33-3051	Police and Sheriff's Patrol Officers	1,795	1,854	59	3.3%	6	46	93	145	\$28.86
33-9032	Security Guards	893	930	37	4.1%	4	48	71	123	\$13.76
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	107	117	10	9.4%	1	15	12	28	\$10.39
33-9098	School Bus Monitors and Protective Service Workers, All Other	134	138	4	3.0%	0	19	15	34	\$15.11 ^^^
35-0000	Food Preparation and Serving Related Occupations	29,427	32,677	3,250	11.0%	325	2,435	3,157	5,917	\$10.60
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	2,629	3,035	406	15.4%	41	126	289	456	\$14.39
35-2011	Cooks, Fast Food	870	811	-59	-6.8%	-6	50	72	116	\$10.42
35-2012	Cooks, Institution and Cafeteria	2,176	2,145	-31	-1.4%	-3	127	185	309	\$13.57
35-2014	Cooks, Restaurant	2,096	2,950	854	40.7%	85	148	216	449	\$13.18
35-2015	Cooks, Short Order	197	217	20	10.2%	2	12	18	32	\$11.31
35-2021	Food Preparation Workers	1,959	2,043	84	4.3%	8	157	184	349	\$10.42
35-3011	Bartenders	808	945	137	17.0%	14	40	106	160	\$9.97
35-3023	Fast Food and Counter Workers	12,076	13,094	1,018	8.4%	102	1,220	1,330	2,652	\$10.26
35-3031	Waiters and Waitresses	3,957	4,479	522	13.2%	52	310	504	866	\$9.68
35-3041	Food Servers, Nonrestaurant	717	712	-5	-0.7%	0	56	56	112	\$11.09
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	239	295	56	23.4%	6	23	23	52	\$10.72
35-9021	Dishwashers	621	703	82	13.2%	8	50	55	113	\$10.42
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	613	717	104	17.0%	10	79	75	164	\$10.34
35-9099	Food Preparation and Serving Related Workers, All Other	313	377	64	20.5%	6	30	30	66	\$10.26
37-0000	Building and Grounds Cleaning and Maintenance Occupations	11,000	11,465	465	4.2%	46	642	821	1,509	\$13.95
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	383	384	1	0.3%	0	16	26	42	\$18.64
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	174	177	3	1.7%	0	5	13	18	\$23.33
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	4,812	4,975	163	3.4%	16	305	343	664	\$14.30
37-2012	Maids and Housekeeping Cleaners	2,645	2,739	94	3.6%	9	183	173	365	\$11.15
37-3011	Landscaping and Groundskeeping Workers	2,875	3,073	198	6.9%	20	128	255	403	\$14.30
39-0000	Personal Care and Service Occupations	6,227	6,462	235	3.8%	24	391	494	909	\$12.80
39-1098	First-Line Supervisors of Personal Service & Entertainment and Recreation									
	Workers, Exc Gambling Services	283	311	28	9.9%	3	11	21	35	\$21.67 ^^^
39-3091	Amusement and Recreation Attendants	393	453	60	15.3%	6	41	47	94	\$10.38
39-4021	Funeral Attendants	332	334	2	0.6%	0	19	25	44	\$13.85
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,354	1,264	-90	-6.7%	-9	69	73	133	\$10.99
39-9011	Childcare Workers	1,298	1,286	-12	-0.9%	-1	87	90	176	\$10.97
39-9032	Recreation Workers	880	907	27	3.1%	3	52	85	140	\$13.52
41-0000	Sales and Related Occupations	30,773	29,126	-1,647	-5.4%	-165	1,724	2,464	4,023	\$13.02

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
41-1011	First-Line Supervisors of Retail Sales Workers	3,439	3,169	-270	-7.9%	-27	117	229	319	\$17.82
41-1012	First-Line Supervisors of Non-Retail Sales Workers	381	352	-29	-7.6%	-3	11	22	30	\$35.04
41-2011	Cashiers	10,405	9,227	-1,178	-11.3%	-118	835	940	1,657	\$10.69
41-2022	Parts Salespersons	837	857	20	2.4%	2	36	65	103	\$14.04
41-2031	Retail Salespersons	8,960	8,771	-189	-2.1%	-19	496	732	1,209	\$11.60
41-3011	Advertising Sales Agents	155	141	-14	-9.0%	-1	4	14	17	\$16.34
41-3021	Insurance Sales Agents	937	920	-17	-1.8%	-2	31	52	81	\$18.44
41-3031	Securities, Commodities, and Financial Services Sales Agents	391	407	16	4.1%	2	9	25	36	\$22.82
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial									
	Services, and Travel	955	1,040	85	8.9%	8	25	88	121	\$23.18
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific		,							
-	Products	132	144	12	9.1%	1	4	9	14	\$47.13
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and									
	Scientific Products	1,995	2,035	40	2.0%	4	60	136	200	\$26.96
41-9022	Real Estate Sales Agents	512	541	29	5.7%	3	22	23	48	\$17.67
43-0000	Office and Administrative Support Occupations	39,074	37,413	-1,661	-4.3%	-166	1,850	2,301	3,985	\$17.47
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,284	2,177	-107	-4.7%	-11	83	136	208	\$22.97
43-3011	Bill and Account Collectors	162	148	-14	-8.6%	-1	6	11	16	\$17.74
43-3021	Billing and Posting Clerks	1,388	1,414	26	1.9%	3	58	86	147	\$17.74
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,620	3,510	-110	-3.0%	-11	209	182	380	\$17.90
43-3051	Payroll and Timekeeping Clerks	313	278	-35	-11.2%	-4	14	16	26	\$18.21
43-3071	Tellers	1,767	1,468	-299	-16.9%	-30	66	102	138	\$14.13
43-4031	Court, Municipal, and License Clerks	1,405	1,484	79	5.6%	8	70	73	151	\$17.69
43-4051	Customer Service Representatives	3,730	3,480	-250	-6.7%	-25	170	284	429	\$16.32
43-4061	Eligibility Interviewers, Government Programs	242	249	7	2.9%	1	9	13	23	\$22.35
43-4071	File Clerks	142	121	-21	-14.8%	-2	7	8	13	\$14.36
43-4081	Hotel, Motel, and Resort Desk Clerks	465	547	82	17.6%	8	29	54	91	\$10.97
43-4111	Interviewers, Except Eligibility and Loan	419	362	-57	-13.6%	-6	23	25	42	\$14.32
43-4121	Library Assistants, Clerical	378	358	-20	-5.3%	-2	33	24	55	\$10.85
43-4131	Loan Interviewers and Clerks	376	367	-9	-2.4%	-1	11	22	32	\$17.90
43-4151	Order Clerks	178	143	-35	-19.7%	-4	7	10	13	\$17.74
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	174	163	-11	-6.3%	-1	6	10	15	\$17.91
43-4171	Receptionists and Information Clerks	2,144	2,151	7	0.3%	1	120	148	269	\$13.67
43-4199	Information and Record Clerks, All Other	177	186	9	5.1%	1	7	12	20	\$18.29
43-5021	Couriers and Messengers	208	197	-11	-5.3%	-1	8	11	18	\$13.58
43-5031	Police, Fire, and Ambulance Dispatchers	386	401	15	3.9%	2	14	22	38	\$18.42
43-5032	Dispatchers, Except Police, Fire, and Ambulance	500	518	18	3.6%	2	18	28	48	\$17.91
43-5051	Postal Service Clerks	378	344	-34	-9.0%	-3	16	13	26	\$25.12
43-5052	Postal Service Mail Carriers	1,161	1,054	-107	-9.2%	-11	38	40	67	\$23.30
43-5061	Production, Planning, and Expediting Clerks	710	741	31	4.4%	3	26	47	76	\$23.23
43-5071	Shipping, Receiving, and Traffic Clerks	1,500	1,385	-115	-7.7%	-12	53	85	126	\$17.48

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	173	189	16	9.3%	2	7	10	19	\$18.19
43-6011	Executive Secretaries and Executive Administrative Assistants	437	354	-83	-19.0%	-8	20	22	34	\$23.36
43-6012	Legal Secretaries	187	138	-49	-26.2%	-5	8	9	12	\$17.69
43-6013	Medical Secretaries	1,815	1,943	128	7.1%	13	96	105	214	\$14.36
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,751	3,402	-349	-9.3%	-35	182	200	347	\$17.38
43-9021	Data Entry Keyers	209	164	-45	-21.5%	-4	8	12	16	\$15.11
43-9041	Insurance Claims and Policy Processing Clerks	185	185	0	0.0%	0	6	11	17	\$18.06
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	133	118	-15	-11.3%	-2	6	8	12	\$14.19
43-9061	Office Clerks, General	7,231	7,007	-224	-3.1%	-22	388	422	788	\$16.66
45-0000	Farming, Fishing, and Forestry Occupations	3,550	3,689	139	3.9%	14	150	411	575	\$17.65
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	140	152	12	8.6%	1	5	15	21	\$29.36
45-2091	Agricultural Equipment Operators	264	300	36	13.6%	4	12	32	48	\$21.85 +
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	2,390	2,501	111	4.6%	11	104	280	395	\$14.13
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	255	232	-23	-9.0%	-2	10	28	36	\$13.50
45-4022	Logging Equipment Operators	120	127	7	5.8%	1	4	14	19	\$18.28
47-0000	Construction and Extraction Occupations	18,388	19,485	1,097	6.0%	110	569	1,320	1,999	\$22.74
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	1,342	1,464	122	9.1%	12	40	91	143	\$29.98
47-2021	Brickmasons and Blockmasons	122	121	-1	-0.8%	0	4	8	12	\$28.13
47-2031	Carpenters	2,582	2,571	-11	-0.4%	-1	75	161	235	\$22.48
47-2051	Cement Masons and Concrete Finishers	635	635	0	0.0%	0	15	42	57	\$22.37
47-2061	Construction Laborers	4,584	5,014	430	9.4%	43	142	324	509	\$18.29
47-2071	Paving, Surfacing, and Tamping Equipment Operators	117	123	6	5.1%	1	4	9	14	\$23.01
47-2073	Operating Engineers and Other Construction Equipment Operators	2,326	2,403	77	3.3%	8	77	170	255	\$22.83
47-2111	Electricians	1,071	1,131	60	5.6%	6	32	81	119	\$26.66
47-2141	Painters, Construction and Maintenance	328	347	19	5.8%	2	10	19	31	\$17.94
47-2152	Plumbers, Pipefitters, and Steamfitters	668	677	9	1.4%	1	20	48	69	\$28.38
47-2181	Roofers	243	257	14	5.8%	1	6	18	25	\$18.18
47-4041	Hazardous Materials Removal Workers	622	641	19	3.1%	2	24	51	77	\$37.32
47-4051	Highway Maintenance Workers	1,023	1,059	36	3.5%	4	41	65	110	\$18.10
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	185	211	26	14.1%	3	6	16	25	\$17.87
47-5013	Service Unit Operators, Oil, Gas, and Mining	443	544	101	22.8%	10	10	48	68	\$22.56
47-5071	Roustabouts, Oil and Gas	335	433	98	29.3%	10	8	37	55	\$14.31
49-0000	Installation, Maintenance, and Repair Occupations	15,692	16,471	779	5.0%	78	504	1,016	1,598	\$22.42
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	1,053	1,096	43	4.1%	4	31	64	99	\$31.08
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	413	445	32	7.8%	3	15	33	51	\$28.90
49-3021	Automotive Body and Related Repairers	378	369	-9	-2.4%	-1	12	22	33	\$21.42
49-3023	Automotive Service Technicians and Mechanics	1,929	1,861	-68	-3.5%	-7	56	129	178	\$17.93
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	1,382	1,524	142	10.3%	14	41	91	146	\$22.42
49-3041	Farm Equipment Mechanics and Service Technicians	124	140	16	12.9%	2	4	9	15	\$17.73
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	363	387	24	6.6%	2	11	25	38	\$23.28
49-3093	Tire Repairers and Changers	280	288	8	2.9%	1	9	24	34	\$13.81

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	189	187	-2	-1.1%	0	4	11	15	\$30.13
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	993	1,015	22	2.2%	2	26	68	96	\$22.52
49-9031	Home Appliance Repairers	111	111	0	0.0%	0	4	6	10	\$18.02
49-9041	Industrial Machinery Mechanics	1,450	1,681	231	15.9%	23	48	85	156	\$28.14
49-9043	Maintenance Workers, Machinery	151	168	17	11.3%	2	5	9	16	\$37.30
49-9044	Millwrights	302	335	33	10.9%	3	9	18	30	\$30.07
49-9051	Electrical Power-Line Installers and Repairers	448	435	-13	-2.9%	-1	8	30	37	\$37.02
49-9052	Telecommunications Line Installers and Repairers	234	266	32	13.7%	3	6	21	30	\$23.20
49-9071	Maintenance and Repair Workers, General	4,072	4,269	197	4.8%	20	147	243	410	\$18.78
49-9098	HelpersInstallation, Maintenance, and Repair Workers	375	390	15	4.0%	2	16	32	50	\$16.93
49-9099	Installation, Maintenance, and Repair Workers, All Other	359	371	12	3.3%	1	13	24	38	\$18.39
51-0000	Production Occupations	27,737	26,963	-774	-2.8%	-77	1,000	1,941	2,864	\$17.92
51-1011	First-Line Supervisors of Production and Operating Workers	1,951	1,946	-5	-0.3%	0	59	131	190	\$29.22
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders,	,	,			_				
	Tapers, and Finishers	160	154	-6	-3.8%	-1	6	10	15	\$14.42
51-2090	Miscellaneous Assemblers and Fabricators	3,152	2,959	-193	-6.1%	-19	117	218	316	\$16.96
51-3011	Bakers	273	269	-4	-1.5%	0	15	20	35	\$13.44
51-3021	Butchers and Meat Cutters	639	588	-51	-8.0%	-5	25	46	66	\$13.73
51-3092	Food Batchmakers	1,141	1,099	-42	-3.7%	-4	52	84	132	\$18.05
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and	,	,							· ·
	Plastic	300	277	-23	-7.7%	-2	10	18	26	\$18.12
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	269	242	-27	-10.0%	-3	9	16	22	\$18.35
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and									
	Plastic	525	500	-25	-4.8%	-2	16	35	49	\$17.10
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and									
	Tenders, Metal and Plastic	289	292	3	1.0%	0	13	20	33	\$17.48
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	163	134	-29	-17.8%	-3	5	10	12	\$23.54
51-4041	Machinists	1,091	1,109	18	1.7%	2	37	75	114	\$18.21
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders,									
	Metal and Plastic	500	486	-14	-2.8%	-1	16	33	48	\$17.47
51-4111	Tool and Die Makers	121	115	-6	-5.0%	-1	4	7	10	\$23.21
51-4121	Welders, Cutters, Solderers, and Brazers	1,027	1,089	62	6.0%	6	28	84	118	\$19.05
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	116	103	-13	-11.2%	-1	4	7	10	\$22.76
51-5112	Printing Press Operators	399	371	-28	-7.0%	-3	14	27	38	\$17.27
51-5113	Print Binding and Finishing Workers	127	107	-20	-15.8%	-2	6	7	11	\$17.38
51-6011	Laundry and Dry-Cleaning Workers	423	449	26	6.2%	3	28	29	60	\$11.07
51-6031	Sewing Machine Operators	293	272	-21	-7.2%	-2	17	15	30	\$13.80
51-7011	Cabinetmakers and Bench Carpenters	717	787	70	9.8%	7	28	42	77	\$17.29
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	456	454	-2	-0.4%	0	16	35	51	\$17.84
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	764	784	20	2.6%	2	23	56	81	\$17.44
51-8013	Power Plant Operators	412	322	-90	-21.8%	-9	10	25	26	\$37.91

Occupational* Employment Projections Report, 2020-2030

		Employment* Change in								
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
51-8031	Water and Wastewater Treatment Plant and System Operators	498	473	-25	-5.0%	-2	14	30	42	\$22.49
51-8091	Chemical Plant and System Operators	162	146	-16	-9.9%	-2	4	12	14	\$46.67
51-9011	Chemical Equipment Operators and Tenders	506	434	-72	-14.2%	-7	10	36	39	\$22.63
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	112	104	-8	-7.1%	-1	4	8	11	\$21.52
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	387	388	1	0.3%	0	13	29	42	\$18.05
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	327	285	-42	-12.8%	-4	14	23	33	\$18.04
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and									
	Tenders	879	828	-51	-5.8%	-5	23	63	81	\$18.05
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,275	1,090	-185	-14.5%	-18	45	94	121	\$19.98
51-9111	Packaging and Filling Machine Operators and Tenders	1,562	1,571	9	0.6%	1	65	104	170	\$17.12
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	579	622	43	7.4%	4	17	43	64	\$17.71
51-9161	Computer Numerically Controlled Tool Operators	710	644	-66	-9.3%	-7	23	50	66	\$18.20
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	124	136	12	9.7%	1	4	10	15	\$28.27
51-9193	Cooling and Freezing Equipment Operators and Tenders	299	316	17	5.7%	2	10	23	35	\$22.81 +
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	230	260	30	13.0%	3	9	16	28	\$17.01
51-9196	Paper Goods Machine Setters, Operators, and Tenders	526	483	-43	-8.2%	-4	23	34	53	\$18.20
51-9198	HelpersProduction Workers	298	282	-16	-5.4%	-2	14	27	39	\$16.37
51-9199	Production Workers, All Other	299	305	6	2.0%	1	10	22	33	\$17.86
53-0000	Transportation and Material Moving Occupations	31,061	33,752	2,691	8.7%	269	1,474	2,492	4,235	\$17.34
53-1047	FirstLine Supervisors of Transportation & Material Moving Workers, Exc Aircraft									
	Cargo Handling Supervisor	1,374	1,414	40	2.9%	4	51	97	152	\$22.63
53-3031	Driver/Sales Workers	2,595	2,933	338	13.0%	34	113	187	334	\$10.52
53-3032	Heavy and Tractor-Trailer Truck Drivers	7,123	7,842	719	10.1%	72	306	507	885	\$22.73
53-3033	Light Truck or Delivery Services Drivers	2,260	2,450	190	8.4%	19	96	160	275	\$17.01
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	1,540	2,064	524	34.0%	52	119	90	261	\$18.05 ^^^
53-3099	Motor Vehicle Operators, All Other	101	107	6	5.9%	1	10	6	17	\$17.10
53-5011	Sailors and Marine Oilers	131	142	11	8.4%	1	4	12	17	\$18.12
53-6031	Automotive and Watercraft Service Attendants	325	303	-22	-6.8%	-2	14	28	40	\$11.27
53-7021	Crane and Tower Operators	163	165	2	1.2%	0	4	12	16	\$28.90
53-7051	Industrial Truck and Tractor Operators	1,534	1,570	36	2.4%	4	47	119	170	\$18.36
53-7061	Cleaners of Vehicles and Equipment	818	822	4	0.5%	0	40	73	113	\$13.56
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	5,657	6,100	443	7.8%	44	257	512	813	\$15.71
53-7063	Machine Feeders and Offbearers	100	99	-1	-1.0%	0	6	7	13	\$20.86
53-7064	Packers and Packagers, Hand	929	987	58	6.2%	6	55	78	139	\$13.28
53-7065	Stockers and Order Fillers	4,836	4,984	148	3.1%	15	280	479	774	\$13.73
53-7081	Refuse and Recyclable Material Collectors	444	551	107	24.1%	11	21	45	77	\$18.08

* Occupations with 100 or more workers.

** Certain occupations only report wages at the annual level.

^ National hourly wage.

^^ National annual wage.

^^^ National aggregate wage.

Source: Ohio Department of Job and Family Services, Bureau of Labor Market Information, June 2023.

Wage above max.

Wage not available due to OES/SOC changes.

+ Statewide hourly wage.

++ Statewide annual wage.

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
	Total, All Occupations	Needed for Entry	Occupation	Occupation	\$17.86
11-0000	Management Occupations				\$37.34
11-1011	Chief Executives	Bachelor's degree	5 years or more	None	\$78.25
11-1011	General and Operations Managers	Bachelor's degree	5 years or more	None	\$35.94
11-1021	Legislators	Bachelor's degree	Less than 5 years	None	\$36,208 **
11-2022	Sales Managers	Bachelor's degree	Less than 5 years	None	\$57.28
11-3010	Administrative Services and Facilities Managers	Bachelor's degree	Less than 5 years	None	\$47.73 ^
11-3010	0	Bachelor's degree		None	\$56.99
11-3021	Computer and Information Systems Managers Financial Managers	Bachelor's degree	5 years or more	None	\$36.99
11-3051	Industrial Production Managers	Bachelor's degree	5 years or more	None	\$49.32
11-3051 11-3071			5 years or more		\$37.34
	Transportation, Storage, and Distribution Managers	High school diploma or equivalent	5 years or more	None	
11-3121	Human Resources Managers	Bachelor's degree	5 years or more	None	\$56.91
11-9013	Farmers, Ranchers, and Other Agricultural Managers	High school diploma or equivalent	5 years or more	None	\$35.12 ^
11-9021	Construction Managers	Bachelor's degree	None	Moderate-term on-the-job training	\$43.49
11-9032	Education Administrators, Elementary and Secondary School	Master's degree	5 years or more	None	\$94,315 **
11-9033	Education Administrators, Postsecondary	Master's degree	Less than 5 years	None	\$45.96
11-9051	Food Service Managers	High school diploma or equivalent	Less than 5 years	None	\$23.35
11-9081	Lodging Managers	High school diploma or equivalent	Less than 5 years	None	\$27.80
11-9111	Medical and Health Services Managers	Bachelor's degree	Less than 5 years	None	\$38.43
11-9141	Property, Real Estate, and Community Association Managers	High school diploma or equivalent	Less than 5 years	None	\$22.38
11-9151	Social and Community Service Managers	Bachelor's degree	Less than 5 years	None	\$29.01
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except				
	Gambling; and Managers, All Other	Bachelor's degree	Less than 5 years	None	\$59.93 ^^^
13-0000	Business and Financial Operations Occupations				\$29.17
13-1020	Buyers and Purchasing Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$27.85
13-1031	Claims Adjusters, Examiners, and Investigators	High school diploma or equivalent	None	Long-term on-the-job training	\$38.60
13-1041	Compliance Officers	Bachelor's degree	None	Moderate-term on-the-job training	\$27.21
13-1051	Cost Estimators	Bachelor's degree	None	Moderate-term on-the-job training	\$29.11
13-1071	Human Resources Specialists	Bachelor's degree	None	None	\$27.40
13-1075	Labor Relations Specialists	Bachelor's degree	Less than 5 years	None	\$30.35
13-1081	Logisticians	Bachelor's degree	None	None	\$37.03
13-1111	Management Analysts	Bachelor's degree	Less than 5 years	None	\$36.43
13-1121	Meeting, Convention, and Event Planners	Bachelor's degree	None	None	\$28.94
13-1131	Fundraisers	Bachelor's degree	None	None	\$27.36
13-1151	Training and Development Specialists	Bachelor's degree	Less than 5 years	None	\$23.15
13-1161	Market Research Analysts and Marketing Specialists	Bachelor's degree	None	None	\$23.76
13-1198	Project Management Specialists and Business Operations Specialists, All Other	Bachelor's degree	None	None	\$35.90 ^^^
13-2011	Accountants and Auditors	Bachelor's degree	None	None	\$29.66
13-2052	Personal Financial Advisors	Bachelor's degree	None	Long-term on-the-job training	\$35.62
13-2072	Loan Officers	Bachelor's degree	Less than 5 years	Moderate-term on-the-job training	\$30.37
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial				
10 2000	Specialists, All Other	Bachelor's degree	None	None	\$35.21 ^^^
15 0000	Computer and Mathematical Occupations				\$29.89

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
15-1211	Computer Systems Analysts	Bachelor's degree	None	None	\$36.05
15-1231	Computer Network Support Specialists	Associate's degree	None	None	\$28.90
15-1232	Computer User Support Specialists	Some college, no degree	None	None	\$22.44
15-1244	Network and Computer Systems Administrators	Bachelor's degree	None	None	\$36.89
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	Bachelor's degree	None	None	\$49.49 ^^^
15-1299	Computer Occupations, All Other	Bachelor's degree	None	None	\$36.05
17-0000	Architecture and Engineering Occupations		None	None	\$36.30
17-1022	Surveyors	Bachelor's degree	None	Internship/residency	\$28.02
17-2051	Civil Engineers	Bachelor's degree	None	None	\$37.62
17-2051	Electrical Engineers	Bachelor's degree	None	None	\$44.82
17-2071	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	Bachelor's degree	None	None	\$48.98
17-2111	Industrial Engineers	Bachelor's degree	None	None	\$37.89
17-2112	Mechanical Engineers		None	None	\$35.85
		Bachelor's degree			
17-2199	Engineers, All Other	Bachelor's degree	None	None	\$36.17
17-3023	Electrical and Electronics Engineering Technicians	Associate's degree	None	None	\$28.52
17-3026	Industrial Engineering Technicians	Associate's degree	None	None	\$27.41
17-3098	Calibration and Engineering Technologists and Technicians, Except Drafters, All			N1	¢20.40.444
40.0000	Other	Associate's degree	None	None	\$29.18 ^^^
19-0000	Life, Physical, and Social Science Occupations		N .	N	\$30.65
19-2041	Environmental Scientists and Specialists, Including Health	Bachelor's degree	None	None	\$38.90
19-3031	Clinical, Counseling, and School Psychologists	Doctoral or professional degree	None	Internship/residency	\$38.96 ^^^
19-5011	Occupational Health and Safety Specialists	Bachelor's degree	None	None	\$35.82
19-5012	Occupational Health and Safety Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.08
21-0000	Community and Social Service Occupations				\$22.03
21-1012	Educational, Guidance, School, and Vocational Counselors	Master's degree	None	None	\$29.30
21-1015	Rehabilitation Counselors	Master's degree	None	None	\$17.70
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Bachelor's degree	None	None	\$22.42
21-1021	Child, Family, and School Social Workers	Bachelor's degree	None	None	\$21.78
21-1022	Healthcare Social Workers	Master's degree	None	Internship/residency	\$23.91
21-1023	Mental Health and Substance Abuse Social Workers	Master's degree	None	Internship/residency	\$18.68
21-1029	Social Workers, All Other	Bachelor's degree	None	None	\$28.54
21-1092	Probation Officers and Correctional Treatment Specialists	Bachelor's degree	None	Short-term on-the-job training	\$22.96
21-1093	Social and Human Service Assistants	High school diploma or equivalent	None	Short-term on-the-job training	\$14.94
21-1099	Community and Social Service Specialists, All Other	Bachelor's degree	None	None	\$18.32
21-2011	Clergy	Bachelor's degree	None	Moderate-term on-the-job training	\$23.73
23-0000	Legal Occupations				\$29.38
23-1011	Lawyers	Doctoral or professional degree	None	None	\$37.68
23-1023	Judges, Magistrate Judges, and Magistrates	Doctoral or professional degree	5 years or more	Short-term on-the-job training	\$47.62
23-2011	Paralegals and Legal Assistants	Associate's degree	None	None	\$18.06
25-0000	Education, Training, and Library Occupations				\$29.04
25-1011	Business Teachers, Postsecondary	Doctoral or professional degree	None	None	\$98,831 **
25-1022	Mathematical Science Teachers, Postsecondary	Doctoral or professional degree	None	None	\$77,456 **
25-1032	Engineering Teachers, Postsecondary	Doctoral or professional degree	None	None	\$99,600 **

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
25-1042	Biological Science Teachers, Postsecondary	Doctoral or professional degree	None	None	\$77.833 **
25-1042	Psychology Teachers, Postsecondary	Doctoral or professional degree	None	None	\$77,629 **
25-1000	Health Specialties Teachers, Postsecondary	Doctoral or professional degree	Less than 5 years	None	\$82,106 **
25-1071	Nursing Instructors and Teachers, Postsecondary	Doctoral or professional degree	Less than 5 years	None	\$71,830 **
25-1072	Education Teachers, Postsecondary	Doctoral or professional degree	Less than 5 years	None	\$61,550 **
25-1081	Art, Drama, and Music Teachers, Postsecondary	Master's degree	None	None	\$61,550 **
25-1121	Communications Teachers, Postsecondary	Doctoral or professional degree	None	None	\$81,248 **
25-1122	English Language and Literature Teachers, Postsecondary	Doctoral or professional degree	None	None	\$63,742 **
25-1123	Recreation and Fitness Studies Teachers, Postsecondary	Doctoral or professional degree	None	None	\$63,742 **
-					. ,
25-1194	Vocational Education Teachers, Postsecondary	Bachelor's degree	Less than 5 years	None	\$29.13
25-1199	Postsecondary Teachers, All Other	Doctoral or professional degree	None	None	\$58,917 **
25-2011	Preschool Teachers, Except Special Education	Associate's degree	None	None	\$13.75
25-2012	Kindergarten Teachers, Except Special Education	Bachelor's degree	None	None	\$61,006 **
25-2021	Elementary School Teachers, Except Special Education	Bachelor's degree	None	None	\$61,318 **
25-2022	Middle School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	\$62,224 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	\$61,922 **
25-2032	Career/Technical Education Teachers, Secondary School	Bachelor's degree	Less than 5 years	None	\$72,486 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	Bachelor's degree	None	None	\$61,044 **
25-2057	Special Education Teachers, Middle School	Bachelor's degree	None	None	\$59,617 **
25-2058	Special Education Teachers, Secondary School	Bachelor's degree	None	None	\$60,902 **
25-3021	Self-Enrichment Education Teachers	High school diploma or equivalent	Less than 5 years	None	\$14.44
25-3031	Substitute Teachers, Short-Term	Bachelor's degree	None	None	\$14.16
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	Bachelor's degree	None	None	\$17.94 ^^^
25-4022	Librarians and Media Collections Specialists	Master's degree	None	None	\$22.95
25-4031	Library Technicians	Postsecondary non-degree award	None	None	\$13.79
25-9031	Instructional Coordinators	Master's degree	5 years or more	None	\$29.28
25-9045	Teaching Assistants, Except Postsecondary	Some college, no degree	None	None	\$27,396 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations				\$17.26
27-1023	Floral Designers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$12.17
27-1024	Graphic Designers	Bachelor's degree	None	None	\$18.61
27-1025	Interior Designers	Bachelor's degree	None	None	\$22.71
27-1026	Merchandise Displayers and Window Trimmers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.19
27-2022	Coaches and Scouts	Bachelor's degree	None	None	\$29,929 **
27-3011	Radio and Television Announcers	Bachelor's degree	None	None	\$11.12
27-3023	News Analysts, Reporters, and Journalists	Bachelor's degree	None	None	\$14.73
27-3031	Public Relations Specialists	Bachelor's degree	None	None	\$21.15
27-4021	Photographers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.71
29-0000	Healthcare Practitioners and Technical Occupations				\$28.70
29-1011	Chiropractors	Doctoral or professional degree	None	None	\$37.61
29-1021	Dentists, General	Doctoral or professional degree	None	None	\$78.88
29-1041	Optometrists	Doctoral or professional degree	None	None	\$47.53
29-1051	Pharmacists	Doctoral or professional degree	None	None	\$60.87
29-1071	Physician Assistants	Master's degree	None	None	\$57.05

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
29-1122	Occupational Therapists	Master's degree	None	None	\$37.32
29-1122	Physical Therapists	Doctoral or professional degree	None	None	\$42.41
29-1125	Recreational Therapists	Bachelor's degree	None	None	\$22.29
29-1126	Respiratory Therapists	Associate's degree	None	None	\$28.52
29-1120	Speech-Language Pathologists	Master's degree	None	Internship/residency	\$35.15
29-1127	Veterinarians	Doctoral or professional degree	None	None	\$45.96
29-1131	Registered Nurses	Bachelor's degree	None	None	\$29.47
29-1141	Nurse Anesthetists	Master's degree	None	None	<u>\$25.47</u>
29-1171	Nurse Practitioners	Master's degree	None	None	\$48.52
29-1215	Family Medicine Physicians	Doctoral or professional degree	None	Internship/residency	348.32 #
29-1213	Physicians, All Other; and Ophthalmologists, Except Pediatric	Doctoral or professional degree	None		\$37.45 ^^^
	Surgeons, Except Ophthalmologists			Internship/residency	\$37.45 AMA # ^^^
29-1248		Doctoral or professional degree	None	Internship/residency	
29-1292	Dental Hygienists	Associate's degree	None	None	\$29.58
29-2010	Clinical Laboratory Technologists and Technicians	Bachelor's degree	None	None	\$23.22
29-2031	Cardiovascular Technologists and Technicians	Associate's degree	None	None	\$28.50
29-2032	Diagnostic Medical Sonographers	Associate's degree	None	None	\$29.11
29-2034	Radiologic Technologists	Associate's degree	None	None	\$22.99
29-2040	Emergency Medical Technicians and Paramedics	Postsecondary non-degree award	None	None	\$17.76 ^
29-2052	Pharmacy Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.07
29-2055	Surgical Technologists	Postsecondary non-degree award	None	None	\$22.06
29-2061	Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree award	None	None	\$22.15
29-2081	Opticians, Dispensing	High school diploma or equivalent	None	Long-term on-the-job training	\$20.79
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	Dectrocondary non-degree award	Nono	None	\$22.55 ^^^
21 0000		Postsecondary non-degree award	None	None	\$22.55 AMA \$13.67
31-0000	Healthcare Support Occupations	Utab ask and dislance, as a substant	Nerre	Chart tawa an the isk tasising	•
31-1120	Home Health and Personal Care Aides	High school diploma or equivalent	None	Short-term on-the-job training	\$11.15 \$13.88
31-1131	Nursing Assistants	Postsecondary non-degree award	None	None	
31-2011	Occupational Therapy Assistants	Associate's degree	None	None	\$28.55
31-2021	Physical Therapist Assistants	Associate's degree	None	None	\$28.90
31-9011	Massage Therapists	Postsecondary non-degree award	None	None	\$18.47
31-9091	Dental Assistants	Postsecondary non-degree award	None	None	\$17.79
31-9092	Medical Assistants	Postsecondary non-degree award	None	None	\$14.47
31-9095	Pharmacy Aides	High school diploma or equivalent	None	Short-term on-the-job training	\$13.08
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.36
31-9097	Phlebotomists	Postsecondary non-degree award	None	None	\$14.34
31-9099	Healthcare Support Workers, All Other	High school diploma or equivalent	None	None	\$14.34
33-0000	Protective Service Occupations		Less then 5		\$22.81
33-1012	First-Line Supervisors of Police and Detectives	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training	\$37.34
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	Postsecondary non-degree award	Less than 5 years	Moderate-term on-the-job training	\$29.09
33-2011	Firefighters	Postsecondary non-degree award	None	Long-term on-the-job training	\$22.19
33-3012	Correctional Officers and Jailers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.81
33-3051	Police and Sheriff's Patrol Officers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$28.86
33-9032	Security Guards	High school diploma or equivalent	None	Short-term on-the-job training	\$13.76

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	No formal educational credential		Short-term on-the-job training	\$10.39
33-9092	School Bus Monitors and Protective Service Workers, All Other	High school diploma or equivalent		Short-term on-the-job training	\$15.11 ^^^
35-0000	Food Preparation and Serving Related Occupations		None	Short term on the job training	\$10.60
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent	Less than 5 years	None	\$14.39
35-2011	Cooks, Fast Food	No formal educational credential	None	Short-term on-the-job training	\$10.42
35-2011	Cooks, Institution and Cafeteria	No formal educational credential	None	Short-term on-the-job training	\$13.57
35-2012	Cooks, Restaurant	No formal educational credential		Moderate-term on-the-job training	\$13.18
35-2015	Cooks, Short Order	No formal educational credential	· · · · · ·	Short-term on-the-job training	\$11.31
35-2021	Food Preparation Workers	No formal educational credential	None	Short-term on-the-job training	\$10.42
35-3011	Bartenders	No formal educational credential	None	Short-term on-the-job training	\$9.97
35-3023	Fast Food and Counter Workers	No formal educational credential	None	Short-term on-the-job training	\$10.26
35-3031	Waiters and Waitresses	No formal educational credential	None	Short-term on-the-job training	\$9.68
35-3041	Food Servers, Nonrestaurant	No formal educational credential	None	Short-term on-the-job training	\$11.09
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	No formal educational credential	None	Short-term on-the-job training	\$10.72
35-9021	Dishwashers	No formal educational credential	None	Short-term on-the-job training	\$10.42
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	No formal educational credential	None	Short-term on-the-job training	\$10.34
35-9099	Food Preparation and Serving Related Workers, All Other	No formal educational credential	None	Short-term on-the-job training	\$10.26
37-0000	Building and Grounds Cleaning and Maintenance Occupations		None		\$13.95
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	High school diploma or equivalent	Less than 5 years	None	\$18.64
37-1011	0	High school diploma or equivalent	,	None	\$23.33
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	No formal educational credential	· · · · ·	Short-term on-the-job training	\$14.30
37-2012	Maids and Housekeeping Cleaners	No formal educational credential	None	Short-term on-the-job training	\$11.15
37-3011	Landscaping and Groundskeeping Workers	No formal educational credential	None	Short-term on-the-job training	\$14.30
39-0000	Personal Care and Service Occupations				\$12.80
39-1098	First-Line Supervisors of Personal Service & Entertainment and Recreation				7
00 1000	Workers, Exc Gambling Services	High school diploma or equivalent	Less than 5 years	None	\$21.67 ^^^
39-3091	Amusement and Recreation Attendants	No formal educational credential		Short-term on-the-job training	\$10.38
39-4021	Funeral Attendants	High school diploma or equivalent		Short-term on-the-job training	\$13.85
39-5012	Hairdressers, Hairstylists, and Cosmetologists	Postsecondary non-degree award		None	\$10.99
39-9011	Childcare Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$10.97
39-9032	Recreation Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.52
41-0000	Sales and Related Occupations				\$13.02
41-1011	First-Line Supervisors of Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None	\$17.82
41-1012	First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None	\$35.04
41-2011	Cashiers	No formal educational credential	None	Short-term on-the-job training	\$10.69
41-2022	Parts Salespersons	No formal educational credential	None	Moderate-term on-the-job training	\$14.04
41-2031	Retail Salespersons	No formal educational credential	None	Short-term on-the-job training	\$11.60
41-3011	Advertising Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$16.34
41-3021	Insurance Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.44
41-3031	Securities, Commodities, and Financial Services Sales Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$22.82
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial				
	Services, and Travel	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.18

			Work Experience in	Typical On-The-Job Training Needed	
SOC		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific	Needed for Endly	occupation	occupation	11107 2022
41-4011	Products	Bachelor's degree	None	Moderate-term on-the-job training	\$47.13
41 4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and	Bachelor's degree	None		<i>3</i> 47.15
41-4012		High school diploma or equivalent	Nono	Mederate term on the job training	626 06
41 0022	Scientific Products	High school diploma or equivalent	None	Moderate-term on-the-job training	\$26.96
41-9022	Real Estate Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.67
43-0000	Office and Administrative Support Occupations	Lligh achool diplome or equivalent	Less then 5 years	Nene	\$17.47
43-1011	First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	Less than 5 years	None	\$22.97
43-3011	Bill and Account Collectors	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.74
43-3021	Billing and Posting Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.74
43-3031	Bookkeeping, Accounting, and Auditing Clerks	Some college, no degree	None	Moderate-term on-the-job training	\$17.90
43-3051	Payroll and Timekeeping Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.21
43-3071	Tellers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.13
43-4031	Court, Municipal, and License Clerks	High school diploma or equivalent	None	Long-term on-the-job training	\$17.69
43-4051	Customer Service Representatives	High school diploma or equivalent	None	Short-term on-the-job training	\$16.32
43-4061	Eligibility Interviewers, Government Programs	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.35
43-4071	File Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$14.36
43-4081	Hotel, Motel, and Resort Desk Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$10.97
43-4111	Interviewers, Except Eligibility and Loan	High school diploma or equivalent	None	Short-term on-the-job training	\$14.32
43-4121	Library Assistants, Clerical	High school diploma or equivalent	None	Short-term on-the-job training	\$10.85
43-4131	Loan Interviewers and Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$17.90
43-4151	Order Clerks	Some college, no degree	None	Short-term on-the-job training	\$17.74
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	Associate's degree	None	None	\$17.91
43-4171	Receptionists and Information Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$13.67
43-4199	Information and Record Clerks, All Other	High school diploma or equivalent	None	Short-term on-the-job training	\$18.29
43-5021	Couriers and Messengers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.58
43-5031	Police, Fire, and Ambulance Dispatchers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.42
43-5032	Dispatchers, Except Police, Fire, and Ambulance	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.91
43-5051	Postal Service Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$25.12
43-5052	Postal Service Mail Carriers	High school diploma or equivalent	None	Short-term on-the-job training	\$23.30
43-5061	Production, Planning, and Expediting Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.23
43-5071	Shipping, Receiving, and Traffic Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$17.48
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	High school diploma or equivalent	None	Short-term on-the-job training	\$18.19
43-6011	Executive Secretaries and Executive Administrative Assistants	High school diploma or equivalent	Less than 5 years	None	\$23.36
43-6012	Legal Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.69
43-6013	Medical Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.36
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	High school diploma or equivalent	None	Short-term on-the-job training	\$17.38
43-9021	Data Entry Keyers	High school diploma or equivalent	None	Short-term on-the-job training	\$15.11
43-9041	Insurance Claims and Policy Processing Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.06
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	High school diploma or equivalent	None	Short-term on-the-job training	\$14.19
43-9061	Office Clerks, General	High school diploma or equivalent	None	Short-term on-the-job training	\$16.66
45-0001	Farming, Fishing, and Forestry Occupations				\$17.65
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	High school diploma or equivalent	Less than 5 years	None	\$29.36
45-2091	Agricultural Equipment Operators	No formal educational credential	None	Moderate-term on-the-job training	\$21.85 +
40-2091			NONE	would atter term on the job training	י נט.נאק

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
Code	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	No formal educational credential	None	Short-term on-the-job training	\$14.13
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	No formal educational credential	None	Short-term on-the-job training	\$13.50
45-4022	Logging Equipment Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.28
47-0000	Construction and Extraction Occupations		None	moderate term on the job training	\$22.74
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None	\$29.98
47-2021	Brickmasons and Blockmasons	High school diploma or equivalent	None	Apprenticeship	\$28.13
47-2031	Carpenters	High school diploma or equivalent	None	Apprenticeship	\$22.48
47-2051	Cement Masons and Concrete Finishers	No formal educational credential	None	Moderate-term on-the-job training	\$22.37
47-2061	Construction Laborers	No formal educational credential	None	Short-term on-the-job training	\$18.29
47-2071	Paving, Surfacing, and Tamping Equipment Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.01
47-2073	Operating Engineers and Other Construction Equipment Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.83
47-2111	Electricians	High school diploma or equivalent	None	Apprenticeship	\$26.66
47-2141	Painters, Construction and Maintenance	No formal educational credential	None	Moderate-term on-the-job training	\$17.94
47-2152	Plumbers, Pipefitters, and Steamfitters	High school diploma or equivalent	None	Apprenticeship	\$28.38
47-2181	Roofers	No formal educational credential		Moderate-term on-the-job training	\$18.18
47-4041	Hazardous Materials Removal Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$37.32
47-4051	Highway Maintenance Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.10
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.87
47-5013	Service Unit Operators, Oil, Gas, and Mining	No formal educational credential	None	Moderate-term on-the-job training	\$22.56
47-5071	Roustabouts, Oil and Gas	No formal educational credential	None	Moderate-term on-the-job training	\$14.31
49-0000	Installation, Maintenance, and Repair Occupations			,	\$22.42
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	High school diploma or equivalent	Less than 5 years	None	\$31.08
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$28.90
49-3021	Automotive Body and Related Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$21.42
49-3023	Automotive Service Technicians and Mechanics	Postsecondary non-degree award	None	Short-term on-the-job training	\$17.93
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	High school diploma or equivalent	None	Long-term on-the-job training	\$22.42
49-3041	Farm Equipment Mechanics and Service Technicians	High school diploma or equivalent	None	Long-term on-the-job training	\$17.73
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	High school diploma or equivalent	None	Long-term on-the-job training	\$23.28
49-3093	Tire Repairers and Changers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.81
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	High school diploma or equivalent	None	Moderate-term on-the-job training	\$30.13
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Postsecondary non-degree award	None	Long-term on-the-job training	\$22.52
49-9031	Home Appliance Repairers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.02
49-9041	Industrial Machinery Mechanics	High school diploma or equivalent	None	Long-term on-the-job training	\$28.14
49-9043	Maintenance Workers, Machinery	High school diploma or equivalent	None	Long-term on-the-job training	\$37.30
49-9044	Millwrights	High school diploma or equivalent	None	Apprenticeship	\$30.07
49-9051	Electrical Power-Line Installers and Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$37.02
49-9052	Telecommunications Line Installers and Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$23.20
49-9071	Maintenance and Repair Workers, General	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.78
49-9098	HelpersInstallation, Maintenance, and Repair Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$16.93
49-9099	Installation, Maintenance, and Repair Workers, All Other	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.39
51-0000	Production Occupations				\$17.92
51-1011	First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	Less than 5 years	None	\$29.22

			Work Experience in	Typical On-The-Job Training Needed	
SOC		Typical Education	a Related	to Attain Competency in the	Median Wage
Code	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders,				•
51 2020	Tapers, and Finishers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.42
51-2090	Miscellaneous Assemblers and Fabricators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$16.96
51-3011	Bakers	No formal educational credential	None	Long-term on-the-job training	\$13.44
51-3021	Butchers and Meat Cutters	No formal educational credential	None	Long-term on-the-job training	\$13.73
51-3092	Food Batchmakers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.05
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and			, <u> </u>	•
	Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.12
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.35
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and			· · · · ·	·
	Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.10
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and			, <u> </u>	•
	Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.48
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.54
51-4041	Machinists	High school diploma or equivalent	None	Long-term on-the-job training	\$18.21
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders,				·
	Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.47
51-4111	Tool and Die Makers	Postsecondary non-degree award	None	Long-term on-the-job training	\$23.21
51-4121	Welders, Cutters, Solderers, and Brazers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$19.05
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.76
51-5112	Printing Press Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.27
51-5113	Print Binding and Finishing Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.38
51-6011	Laundry and Dry-Cleaning Workers	No formal educational credential	None	Short-term on-the-job training	\$11.07
51-6031	Sewing Machine Operators	No formal educational credential	None	Short-term on-the-job training	\$13.80
51-7011	Cabinetmakers and Bench Carpenters	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.29
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.84
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.44
51-8013	Power Plant Operators	High school diploma or equivalent	None	Long-term on-the-job training	\$37.91
51-8031	Water and Wastewater Treatment Plant and System Operators	High school diploma or equivalent	None	Long-term on-the-job training	\$22.49
51-8091	Chemical Plant and System Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$46.67
51-9011	Chemical Equipment Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.63
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$21.52
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.05
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.04
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and				
	Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.05
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$19.98
51-9111	Packaging and Filling Machine Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.12
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.71
51-9161	Computer Numerically Controlled Tool Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.20
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$28.27
51-9193	Cooling and Freezing Equipment Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.81 +
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	High school diploma or equivalent	None	Long-term on-the-job training	\$17.01

Occupational* Education and Training Classifications, Projections Report, 2020-2030

soc		Turnical Education	Work Experience in a Related	Typical On-The-Job Training Needed	Madian Waga
	Occupational Title	Typical Education		to Attain Competency in the	Median Wage May 2021
		Needed for Entry	Occupation	Occupation	-
51-9196	Paper Goods Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.20
51-9198	HelpersProduction Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$16.37
51-9199	Production Workers, All Other	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.86
53-0000	Transportation and Material Moving Occupations				\$17.34
53-1047	FirstLine Supervisors of Transportation & Material Moving Workers, Exc Aircraft				
	Cargo Handling Supervisor	High school diploma or equivalent	Less than 5 years	None	\$22.63
53-3031	Driver/Sales Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$10.52
53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	None	Short-term on-the-job training	\$22.73
53-3033	Light Truck or Delivery Services Drivers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.01
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	No formal educational credential	None	Short-term on-the-job training	\$18.05 ^^^
53-3099	Motor Vehicle Operators, All Other	No formal educational credential	None	Short-term on-the-job training	\$17.10
53-5011	Sailors and Marine Oilers	No formal educational credential	None	Moderate-term on-the-job training	\$18.12
53-6031	Automotive and Watercraft Service Attendants	No formal educational credential	None	Short-term on-the-job training	\$11.27
53-7021	Crane and Tower Operators	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training	\$28.90
53-7051	Industrial Truck and Tractor Operators	No formal educational credential	None	Short-term on-the-job training	\$18.36
53-7061	Cleaners of Vehicles and Equipment	No formal educational credential	None	Short-term on-the-job training	\$13.56
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	No formal educational credential	None	Short-term on-the-job training	\$15.71
53-7063	Machine Feeders and Offbearers	No formal educational credential	None	Short-term on-the-job training	\$20.86
53-7064	Packers and Packagers, Hand	No formal educational credential	None	Short-term on-the-job training	\$13.28
53-7065	Stockers and Order Fillers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.73
53-7081	Refuse and Recyclable Material Collectors	No formal educational credential	None	Short-term on-the-job training	\$18.08

* Occupations with 100 or more workers.

** Certain occupations only report wages at the annual level.

^ National hourly wage.

^^ National annual wage.

^^^ National aggregate wage.

Source: Ohio Department of Job and Family Services, Bureau of Labor Market Information, June 2023.

Wage above max.

▲ Wage not available due to OES/SOC changes.

+ Statewide hourly wage.

++ Statewide annual wage.



Bureau of Labor Market Information Business Principles for Workforce Development

- Partner with the workforce and economic development community.
- Develop and deploy new information solution tools and systems for the workforce and economic development community.
- Provide products and services that are customer- and demand-driven.
- Be known as an important and reliable source for information solutions that support workforce development goals and outcomes.

Acknowledgments: The Workforce Research Section produced this report under the direction of Labor Market Bureau Chief, Byron Archer. To view other publications, access data or provide feedback, visit <u>http://OhioLMI.com</u> or contact the Ohio Bureau of Labor Market Information at (614) 752-9494 or <u>ContactLMI@jfs.ohio.gov</u>.

Mike DeWine, Governor Jon Husted, Lt. Governor State of Ohio <u>http://Ohio.gov</u>

Matt Damschroder, Director

Ohio Department of Job and Family Services http://jfs.ohio.gov

> Office of Workforce Development http://jfs.ohio.gov/owd/

Bureau of Labor Market Information <u>http://OhioLMI.com</u>

This institution is an equal opportunity provider and employer. A proud partner of the American Job Center network.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.